woodland formations where the trees tend to form a canopy. Birds from this habitat have fine pointed bills with a culmen length of 11-12 mm, and a bill depth of 5-6 mm. Southward on the plateau, however, and out of the main heavy Brachystegia belt in the Umyuma and Gwelo areas of the Midlands, there is a quick transition from a thin to a heavy billed form, with culmen 12-14 mm., and a bill depth of 6-7.5 mm. These birds are wholly inhabitants of acacia thorn-veld woodland and in plumage characters are intermediate P.a.griseiventris \ge P.a.cinerascens, which latter race entirely dominates in the thorn-yeld areas of Matabeleland. The rapid change to the southward from griseiventris to cinerascens is apparently due to each race being specialized to a definite habitat, with little if any tendency to occur in areas that are ecologically unsuitable, and that well-developed Brachystegia is never found in direct proximity to thorn veld, the intermediate vegetation being either a more scrubby type of woodland that is unsuited to griseiventris or by a more park-like wooded grassland as in much of the Midlands, where these Tits are either very sparse or almost absent.

As series of these birds are remarkably constant from any given area, it is worth drawing attention to a single male from the Inyanga highlands, taken by the author from an association of *Acacia abyssinica* at 6,000ft. In colour characters it is intermediate *griseiventris*  $\geq$  *cinerascens*, and in having a stout bill: culmen length 13 mm., depth 7 mm. This points to the possibility of their being a dark, heavy billed form in the Inyanga highlands and possibly elsewhere in the Eastern Districts, but at present no other material is available from there.

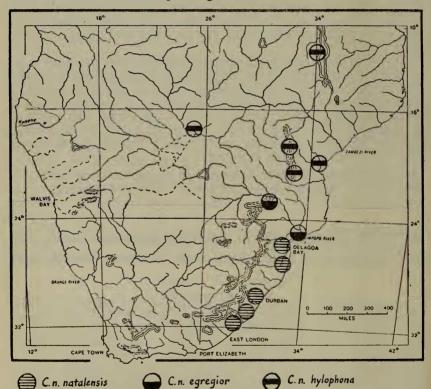
NOTE.—This note has been prepared with the help of the fine material from both the Rhodesias in the National Museum at Bulawayo.

# The South African Races of Cossypha natalensis Smith, with the Description of a new Race from Southern Mozambique

by Mr. P. A. CLANCEY
Received 9th December, 1955

The Natal Robin-chat Cossypha natalensis Smith, 1840: Durban, Natal, a shy inhabitant of both lowland and highland evergreen forest and dense cover, ranges from the eastern districts of the Cape Province and Natal northwards in the east to Kenya Colony, southern Somalia, Uganda, south-western Abyssinia and the southern Sudan, and in the west to Angola, the Belgian Congo, French Equatorial Africa and the Cameroons. Despite its enormous range the amount of research material from any one locality available to workers is limited, due in part to the species' shyness and also to the fact that it has a very patchy distribution and is nowhere truly numerous. Mearns, Smithsonian Miscellaneous Collections, vol. lxi, No. 20, 1913, p. 2, working with very limited comparative material, described the races C.n.intensa Mearns from Taveta and C.n.garguensis Mearns from Mt. Gargues (Uraguess), Matthews Range, Kenya Colony, separating them from the nominate subspecies of the south on somewhat nebulous colour characters. Van Someren, writing in the Novitates

Zoologicae, vol. xxix, 1922, p. 239, states that no races are recognizable, while Friedmann, Bulletin of the Museum of Comparative Zoölogy, vol. lxxxi, No. 1, 1937, p. 251, synonymizes C.n.intensa with C.n.natalensis and suggests that C.n.garguensis may be valid, being paler and smaller. In a short paper in the Durban Museum Novitates, vol. iv, 1, 1952, pp. 14–17, I have shown that the tropical populations of the species differ significantly from those of the eastern Cape, Natal, Zululand, etc., in having the top of the head russet or cinnamon and not dark olivaceous brown, and that at least four races should perhaps be recognized. In this same paper a new race from Nyasaland, C.n.hylophona Clancey: Chinteche, was described. However, in spite of this work on the clearly demonstrable polytypic variation, the species is treated binominally in all recent standard works on birds of the Ethiopian region.



Map showing the localities from which specimens of the three southern races of the Natal Robin-chat *C.natalensis* have been examined.

Since studying this species in 1951 (report published in March, 1952) further material has become available from many parts of South Africa, and it is now possible for me to deal definitively with the question of geographical variation in the austral populations. Through the courteous co-operation of the Directors of the Transvaal Museum, Pretoria, the Natal Museum, Pietermaritzburg, and the Museu Dr. Alvaro de Castro,

Lourenço Marques, I have recently been able to assemble and study a series of over eighty specimens from south-eastern Africa. I find that individual variation is quite circumscribed and that three well-defined races of this robin-chat can be conveniently recognized from the South African sub-continent.

C.n.natalensis, based on a bird collected near Port Natal, i.e., Durban, Natal, is quite numerous in its type-locality and throughout most of the coastal districts of Natal. Of the topotypical populations a good series of specimens is available for research purposes, and study of this material shows that Natal birds are richly coloured ventrally and have the head-top dark olivaceous brown. Other populations agreeing with those of Natal occur in coastal Pondoland to the south and in Zululand and extreme southern Portuguese East Africa (Lourenço Marques and Lebombo Mountains) to the north. The nominate race is constant within the geographical limits defined, the individual variation observed being restricted to slight differences in the intensity of the orange-russet of the ventral surfaces, while birds in abraded dress tend to be duller and less yellowish on the underparts and paler on the crown than newly moulted examples.

To the north of the range of C.n.natalensis, in the sandy, flat savanna country of Portuguese East Africa and adjacent areas, occur interesting populations in which the under-parts of the birds are much duller and paler, less yellowish, and the dorsal surfaces lack much of the rich pigmentation of Natal topotypes. Such birds, however, resemble those of Natal in the dark colouration of their head-tops. Specimens showing such criteria have been examined from several localities in Sul do Save, southern Portuguese East Africa, and from Mariepskop in the eastern Transvaal. How far north the form ranges is not known at the present time, but breeding examples collected by P. A. Sheppard at Mzimbiti and Beira are referable to the red-headed populations to be discussed later in this communication. I am of the opinion that the pale coloured populations of southern Portuguese East Africa exhibit differences occasioned by their residence in a markedly different habitat and appreciably drier and less humid climate than those of Natal, and thereby warrant subspecific segregation. They are formally described as a new race, C.n.egregior mihi, below.

In the highland evergreen forests of eastern Mashonaland, Southern Rhodesia, and the adjacent highland districts of Portuguese East Africa occur birds which differ significantly from the two races already considered. In the colouration of the ventral surfaces they most closely resemble *C.n.natalensis*, but from both this race and *C.n.egregior* they are immediately separable by having the crown of the head russet or cinnamon, not dark olivaceous brown. These populations, as well as those of lower Zambesia, are referable to the race recently described from the highlands of Nyasaland as *C.n.hylophona*, the northern limits of the range of which are still not clear owing to the absence of comparative material from many parts of equatorial Africa. It is believed that *C.n.hylophona* represents the species throughout most of its central African range, being replaced in the coastal districts of Kenya Colony and adjacent areas by *C.n.intensa*, a race which differs from it in having a more robust and arched bill and in being more saturated ventrally. The status of *C.n.garguensis*, still only

known from the unique *Type*, can scarcely be discussed here in the continued absence of adequate material. It is described as being paler and smaller than *C.n.intensa* and *C.n.natalensis*, and is believed to be restricted

to the Matthews Range in northern Kenya Colony.

The present monotypic treatment of *C.natalensis* is not in accordance with the scientific facts, and it is now believed that geographical variation is reasonably well developed in the species. Resulting from this study, three races can be conveniently recognized from within South Africa subcontinental limits. Further study and collecting of the more northerly populations are clearly required before an accurate assessment of the gamut of sub specific variation can be made. Certainly five, and perhaps even six, races will ultimately require to be acknowledged in our taxonomic arrangement of the species.

In the ensuing list of the South African races of *C.natalensis* I have defined the coronal and ventral colours of the forms concerned by means of the system perfected by C. and J. Villalobos, *Colour Atlas*, Buenos Aires, 1947, for the benefit of workers with limited comparative material. The nomenclature, characters and ranges of the three races are as follows:

### 1. Cossypha natalensis natalensis Smith

Cossypha natalensis Smith, Illustrations of the Zoology of South Africa, Aves, 1840, pl. lx (and text): near Port Natal, i.e. Durban, Natal, South Africa.

Top of head dark olivaceous brown (about  $0-2-9^{\circ}$ ); nape and centre of mantle dull russet suffused olivaceous; rump similar; scapulars dark bluegrey. Whole of under surface rich orange-russet, darkest on breast and flanks (about  $0-10-12^{\circ}$ ).

Wings 33 91–96,  $\rightleftharpoons$  84–93, bills (from skull) 17.5–20, tails 33 76–81,  $\rightleftharpoons$  69–77.5 mm.

### (Fifty-six specimens examined)

Range: The coastal areas of Pondoland, eastern Cape Province, Natal and Zululand (mainly in the coastal districts), and the extreme south of Portuguese East Africa in the Lebombo Mountains and the adjacent littoral (Lourenço Marques).

# 2. Cossypha natalensis egregior, subsp.nov.

Similar to *C.n.natalensis* but duller and less richly coloured on the upper parts, and markedly paler and duller, less deep rich orange-russet, ventrally (about  $0-10-10^{\circ}$ ). The throat is particularly pale.

Wings 33 90.5, 91.5, 9 83.5–88, bills (from skull) 18–20, tails 33 76.5, 77, 9 71.5–75 mm.

## (Twelve specimens examined)

Type: 3 adult. Near Manhiça, Sul do Save, southern Portuguese East Africa. Collected by the Durban Museum Expedition. 16 September, 1955. In the Durban Museum.

Range: Known only from Sul do Save, southern Portuguese East Africa, in areas immediately to the north of the range of the nominate race, and in adjacent districts of the eastern Transvaal (Mariepskop) and Southern Rhodesia. Found in thickets in park-like savanna country with a very sandy soil.

3. Cossypha natalensis hylophona Clancey

Cossypha natalensis hylophona Clancey, Durban Museum Novitates,

vol. iv, 1, 1952, p. 15: Chinteche, Nyasaland.

Differs from *C.n.natalensis* and *C.n.egregior* in having the head-top russet or cinnamon (about 00S-5-10°), and in exhibiting brighter and more extensive areas of russet on the lower nape and centre of the back; rump and upper tail-coverts redder. Ventrally still more richly coloured than *C.n.natalensis* (about 0-9-12°).

Wings 33 92–95, 99 86.5-92.5, bills (from skull) 17–20, tails 33 72–81.5,

♀♀ 69-73.5 mm.

(Sixteen specimens examined)

Range: The highland evergreen forests of eastern Mashonaland, Southern Rhodesia, and adjacent highland districts of Portuguese East Africa (Macequece) and to the coast at Beira and Mzimbiti. Extralimitally in the highland evergreen forests of Nyasaland, northern Portuguese East Africa and southern Tanganyika Territory. The populations of this robin-chat occurring in Angola, French Equatorial Africa, the Cameroons, the Belgian Congo, the southern Sudan, south-western Abyssinia, etc., are closely allied to C.n.hylophona, but require further study to determine their correct relationship. Replaced in the Matthews Range, northern Kenya Colony, by C.n.garguensis, and in the coastal districts of East Africa by C.n.intensa.

Note.—The species is not generally recorded as occurring in Northern Rhodesia, but there is an adult of collected by Wilde on the Machili River, south-western Northern Rhodesia, on 15th October, 1908, in the Transvaal Museum. This specimen resembles topotypes of *C.n.hylophona* but is

rather paler on the upper-parts, the back and rump less reddish.

# New Geographical Races of Camaroptera fasciolata and Batis capensis from Southern Rhodesia

by Mr. Reay H. N. Smithers and Miss Mary Paterson
Received 26th March, 1956

Camaroptera fasciolata irwini new race

Description: Differs from C.f. fasciolata (Smith) in lacking the buff colour of the flanks and lower belly, being clear white on the under parts between the barring. The upper parts distinctively lighter and less russet than C.f. fasciolata and lacking the olive greyness of C.f. buttoni (White) and C.f. stierlingi (Reichenow). The upper tail coverts and tail distinctly less russet than C.f. fasciolata, being intermediate between this and C.f. buttoni.

Type: N.M. 20381, Male, 31.8.55, Central Estates, Umvuma, collected by M. P. Stuart Irwin. Taken in bushes and trees growing in rocks in

open grass park-like woodland.,

Distribution: The whole of Southern Rhodesia excluding the border area from Beit Bridge to Plumtree in the south-west and west where it is replaced by the nominate form.

Material examined: Besides the Type the National Museum has a series of 3 from Central Estates, Umvuma, 5 from West Nicholson, 2 from